

CLAIMS

I claim:

1. A method in a first wireless station of a wireless network, the method comprising:

wirelessly receiving a configuration request message from a second wireless station; and

generating a configuration data message for the second wireless station including one or more configuration parameters for the second wireless station, and wirelessly transmitting the configuration data message to the second wireless station,

such that the second wireless station can be configured.
2. A method as recited in claim 1, wherein the method further comprises:

wirelessly transmitting a discovery message,

wherein the configuration request message wirelessly received at the first station is wirelessly transmitted by the second wireless station in response to the discovery message being wirelessly received by the second wireless station.
3. A method as recited in claim 2, wherein the method further comprises:

setting the output RF power level to a relatively low level for the wirelessly transmitting of the discovery message,

such that the range of reception of the wirelessly transmitted configuration data message is limited.
4. A method as recited in claim 2, wherein the wirelessly transmitting the discovery message includes:

wirelessly transmitting a discovery message at a first output RF power level;

waiting for a configuration request message;

in the case that no configuration request message is wirelessly received within a period of time, wirelessly re-transmitting the discovery message at a higher output RF power level; and

repeating such waiting and re-transmitting until either a maximum output RF power level has been reached, or a configuration request message has been wirelessly received,

such that the range of reception of the wirelessly transmitted configuration data message is limited.

5. A method as recited in claim 2, wherein the wirelessly transmitting a discovery message is in response to wirelessly receiving a command from a user.
6. A method as recited in claim 1, wherein the generating includes generating random numbers, and wherein configuration parameters includes a security key.
7. A method as recited in claim 1, wherein the first wireless station is an access point (AP) of the network, and the second wireless station is to be a client station of the AP.
8. A method as recited in claim 7, wherein the wireless network substantially conforms to one of the IEEE 802.11 standards or a derivative thereof.
9. A method as recited in claim 7, wherein the configuration parameters includes a security key.
10. A method as recited in claim 8, wherein the configuration parameters includes a WEP key.
11. A method in a first wireless station of a wireless network, the method comprising:
 - wirelessly receiving a configuration data message from a second wireless station;
 - extracting one or more configuration parameters from the configuration data message; and
 - applying the one or more configuration parameters to the first wireless station to configure the first wireless station,

such that the first wireless station can be automatically configured.

12. A method as recited in claim 11, wherein the method further comprises:
 - wirelessly transmitting a configuration request message,
 - such that the configuration data message is transmitted by the second station in response to the second station receiving the configuration request message.
13. A method as recited in claim 12, further comprising:
 - wirelessly receiving a discovery message from the second wireless station
 - such that the wirelessly transmitting of the configuration request message is in response to the receiving of the discovery message.
14. A method as recited in claim 11, wherein the first wireless station is configured only if a user selects the first wireless station to be configurable.
15. A method as recited in claim 12, wherein the wirelessly transmitting a configuration request message is in response to wirelessly receiving a command from a user.
16. A method as recited in claim 11, wherein the second wireless station is an access point (AP) of the network, and the first wireless station is a client station of the AP.
17. A method as recited in claim 16, wherein the configuration parameters includes a security key.
18. A method as recited in claim 16, wherein the wireless network substantially conforms to one of the IEEE 802.11 standards or a derivative thereof.
19. A method as recited in claim 18, wherein the configuration parameters includes a WEP key.
20. A carrier medium comprising one or more computer readable code segments to instruct a processor to implement a method in a first wireless station of a wireless network, the method comprising:

wirelessly receiving a configuration request message from a second wireless station; and

generating a configuration data message for the second wireless station including one or more configuration parameters for the second wireless station, and wirelessly transmitting the configuration data message to the second wireless station,

such that the second wireless station can be configured.

21. A carrier medium as recited in claim 20, wherein the method further comprises:

wirelessly transmitting a discovery message,

wherein the configuration request message wirelessly received at the first station is wirelessly transmitted by the second wireless station in response to the discovery message being wirelessly received by the second wireless station.

22. A carrier medium as recited in claim 21, wherein the method further comprises:

setting the output RF power level to a relatively low level for the wirelessly transmitting of the discovery message,

such that the range of reception of the wirelessly transmitted configuration data message is limited.

23. A carrier medium as recited in claim 21, wherein the wirelessly transmitting the discovery message includes:

wirelessly transmitting a discovery message at a first output RF power level;

waiting for a configuration request message;

in the case that no configuration request message is wirelessly received within a period of time, wirelessly re-transmitting the discovery message at a higher output RF power level; and

repeating such waiting and re-transmitting until either a maximum output RF power level has been reached, or a configuration request message has been wirelessly received,

such that the range of reception of the wirelessly transmitted configuration data message is limited.

24. A carrier medium as recited in claim 20, wherein the generating includes generating random numbers, and wherein configuration parameters includes a security key.
25. A carrier medium as recited in claim 20, wherein the first wireless station is an access point (AP) of the network, and the second wireless station is a client station of the AP.
26. A carrier medium as recited in claim 25, wherein the wireless network substantially conforms to one of the IEEE 802.11 standards or a derivative thereof.
27. A carrier medium as recited in claim 26, wherein the configuration parameters includes a WEP key.
28. A carrier medium comprising one or more computer readable code segments to instruct a processor to implement a method in a first wireless station of a wireless network, the method comprising:
 - wirelessly receiving a configuration data message from a second wireless station;
 - extracting one or more configuration parameters from the configuration data message; and
 - applying the one or more configuration parameters to the first wireless station to configure the first wireless station,
 such that the first wireless station can be automatically configured.
29. A carrier medium as recited in claim 28, wherein the method further comprises:
 - wirelessly transmitting a configuration request message,

such that the configuration data message is transmitted by the second station in response to the second station receiving the configuration request message.

30. A carrier medium as recited in claim 29, wherein the method further comprises:
- wirelessly receiving a discovery message from the second wireless station
- such that the wirelessly transmitting of the configuration request message is in response to the receiving of the discovery message.
31. A carrier medium as recited in claim 28, wherein the first wireless station is configured only if a user selects the first wireless station to be configurable.
32. A carrier medium as recited in claim 29, wherein the wirelessly transmitting a configuration request message is in response to wirelessly receiving a command from a user.
33. A carrier medium as recited in claim 28, wherein the second wireless station is an access point (AP) of the network, and the first wireless station is a client station of the AP.
34. A carrier medium as recited in claim 33, wherein the wireless network substantially conforms to one of the IEEE 802.11 standards or a derivative thereof.
35. A carrier medium as recited in claim 34, wherein the configuration parameters includes a WEP key.
36. An apparatus in first a station of a wireless network, the apparatus comprising:
- means for wirelessly receiving;
- means for wirelessly transmitting; and
- means for responding to wirelessly receiving a configuration request message from a second wireless station, the responding including generating a configuration data message for the second wireless station including one or more configuration parameters for the second wireless station, and wirelessly transmitting the configuration data message to the second wireless station,

such that the second wireless station can be configured.

37. An apparatus as recited in claim 36, wherein the apparatus further comprises:

means for wirelessly transmitting a discovery message, and

wherein the configuration request message is wirelessly transmitted by the second wireless station in response to the discovery message being wirelessly received by the second wireless station.

38. An apparatus as recited in claim APAPDISC, wherein the apparatus further comprises:

means for setting the output RF power level to a relatively low level for the wirelessly transmitting of the discovery message,

such that the range of reception of the transmitted configuration data message is limited.

39. An apparatus as recited in claim APAPDISC, wherein the means for wirelessly transmitting the discovery message includes:

means for wirelessly transmitting a discovery message at a first output RF power level;

means for waiting for a configuration request message;

means for ascertaining whether no configuration request message has been wirelessly received within a period of time,

means responsive to the means for ascertaining for wirelessly re-transmitting the discovery message at a higher output RF power level if it is ascertained that no configuration request message has been received within the period; and

means for repeating such waiting and re-transmitting until either a maximum output RF power level has been reached, or a configuration request message has been wirelessly received,

such that the range of reception of the transmitted configuration data message is limited.

40. An apparatus as recited in claim 36, wherein the generating includes generating random numbers, and wherein configuration parameters includes a security key.
41. An apparatus as recited in claim 36, wherein the first wireless station is an access point (AP) of the network, and the second wireless station is a client station of the AP.
42. An apparatus as recited in claim 41, wherein the wireless network substantially conforms to one of the IEEE 802.11 standards or a derivative thereof.
43. An apparatus as recited in claim 42, wherein the configuration parameters includes a WEP key.
44. An apparatus in first a station of a wireless network, the apparatus comprising:
 - a wireless transceiver coupled to an antenna and able to wirelessly transmit and wirelessly receive messages to and from another wireless station;
 - a processor coupled to the to respond to cause the transceiver to wirelessly transmit a discovery message,
 - in the case that a configuration request message is received from a second wireless station, the processor further:
 - to generate a configuration data message for the second wireless station including one or more configuration parameters for the second wireless station; and
 - to cause the transceiver to transmit the configuration data message to the second wireless station,such that the second wireless station can be configured.
45. An apparatus as recited in claim 44, further comprising:
 - a variable attenuator between the antenna and the transceiver,such that the transmit power may be limited.
46. An apparatus as recited in claim 44, the apparatus further comprising:
 - a display that communicates the status of the configuration sequence to a user.

47. An apparatus as recited in claim 44, the apparatus further comprises:
- a user interface wherein the wirelessly transmitting the discovery message in response to the user interface wirelessly receiving a command from a user,
- such that a user can initiate the configuration.
48. An apparatus as recited in claim 47, wherein the command includes one or more selectors, each selector corresponding to a set of configuration parameters, and wherein the generating a configuration data message includes configuration parameters from the set of configuration parameters corresponding to the selector.
49. An apparatus in a first wireless station of a wireless network, the apparatus comprising:
- means for wirelessly receiving;
 - means for wirelessly transmitting; and
 - means for responding to wirelessly receiving a configuration data message from a second wireless station, the responding to wirelessly receiving a configuration data message including extracting one or more configuration parameters from the configuration data message, and applying the one or more configuration parameters to the first wireless station,
- such that the first wireless station can be configured.
50. An apparatus as recited in claim 49, wherein the apparatus further comprises:
- means for wirelessly transmitting a configuration request message.
51. An apparatus as recited in claim 50, wherein the means for wirelessly transmitting a configuration request transmits in response to wirelessly receiving a discovery message from the second wireless station, the responding to wirelessly receiving a discovery message including wirelessly transmitting a configuration request message to the second wireless station.

- 52. An apparatus as recited in claim 49, wherein the first wireless station is configured only if a user selects the first wireless station to be configurable.
- 53. An apparatus as recited in claim 50, wherein the wirelessly transmitting a configuration request message is in response to wirelessly receiving a command from a user.
- 54. An apparatus as recited in claim 49, wherein the second wireless station is an access point (AP) of the network, and the first wireless station is a client station of the AP.
- 55. An apparatus as recited in claim 54, wherein the wireless network substantially conforms to one of the IEEE 802.11 standards or a derivative thereof.
- 56. An apparatus as recited in claim 55, wherein the configuration parameters includes a WEP key.